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Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody

Histone H3 K9me2/phospho T6 Antibody
Catalog # ASR5625

Specification

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, I, LCI**
Application Note	**Anti-Histone H3 [p Thr6, Dimethyl Lys9] antibody is tested for Western Blot, Immunofluorescence, and ChIP. This antibody is suitable for Immunocytochemistry and Chromatin Immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 protein by Western Blotting in HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Histone H3 [p Thr6, Dimethyl Lys9] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic dimethylated/phosphorylated peptide surrounding Lysine 9/Threonine 6 of human Histone H3.2.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Additional Information

Gene ID 126961;333932;653604

Other Names
126961

Purity
Anti-Histone H3 [p Thr6, Dimethyl Lys9] was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human Histone H3.2. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and C. elegans. Predicted to react with many species including rat, chicken, Xenopus, Drosophila, and plant based on 100% sequence

homology. Cross-reactivity with Histone H3 from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Protein Information

Name H3C15 (HGNC:20505)

Function
Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

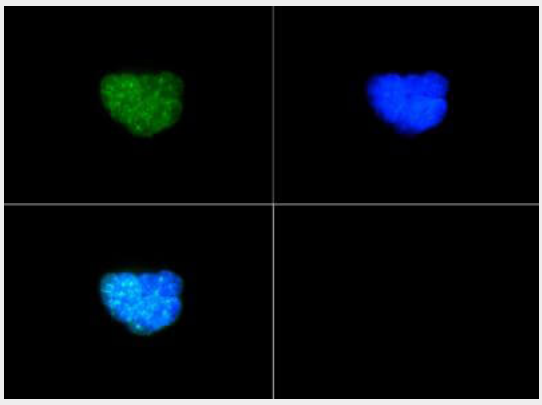
Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Images



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Immunofluorescence of Rabbit Anti-Histone H3 [p Thr6, Dimethyl Lys9] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Thr6, Dimethyl Lys9] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [p Thr6, Dimethyl Lys9] is nuclear and chromosomal. Staining: Histone H3 [p Thr6, Monomethyl Lys9] is expressed in green and the nuclei are counterstained with DAPI (blue).

Anti-Histone H3 [p Thr6, Dimethyl Lys9] (RABBIT) Antibody - Background

The doubly modified dimethyl K9, phospho-T6 histone H3 is known to exist, but very little comprehensive information about the importance of this modification and its mechanism has been published. H3K9me2 is a histone post-translational modification that is enriched in promoters of transcriptionally active genes. It is also important in cellular differentiation and maturation. Phosphorylation of histone H3 is also associated with mitosis and meiosis, and seems to be related to developmental changes. The dual modification of H3K9me2/pT6 is still under investigation and will present more insight into the complex epigenetic code. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.